CLAIMS

1. A system for transmitting a GPS receiver code-phase search range to a integrated GPS/wireless terminal unit operating in a wireless network, said system comprising:

a receiver operable to generate a GPS time reference;

a controller operable to calculate a GPS code-phase search range with reference to a base station geographic location, the wireless coverage area, said GPS time reference and the estimated wireless signal propagation delay within said coverage area, and

a transmitter coupled to said controller and operable to transmit said calculated GPS code search range.

2. The invention of Claim 1 wherein said GPS code-phase search range is defined by a center value and a size value.

3. A system for transmitting a GPS receiver code-phase search range to a integrated GPS/wireless terminal unit operating in a wireless network, comprising:

a GPS receiver operable to generate a GPS time reference;

means for obtaining a time offset for the GPS/wireless terminal unit relative to said GPS time reference;

a controller operable to calculate a GPS code-phase search range with reference to a base station geographic location, the wireless coverage area, and said time reference; and

a transmitter coupled to said controller and operable to transmit said calculated GPS code search range.

4. The invention of Claim 3 wherein said GPS code-phase search range is defined by a center value and a size value.

5. The invention of Claim 3 wherein said means for obtaining a time offset utilizes the round-trip wireless signal propagation time between said base station and the terminal unit to establish said time offset.

6. A system for transmitting a GPS receiver code-phase search range to a integrated GPS/wireless terminal unit operating in a wireless network, comprising:

a GPS receiver operable to generate a GPS time reference;

means for obtaining a time offset for the GPS/wireless terminal unit relative to said GPS time reference;

means for obtaining a location reference for the GPS/wireless terminal unit;

a controller operable to calculate a GPS code-phase search range with reference to said location reference, and said time reference; and

a transmitter coupled to said controller and operable to transmit said calculated GPS code search range.

7. The invention of Claim 6 wherein said GPS code-phase search range is defined by a center value and a size value.

8. The invention of Claim 6 wherein said means for obtaining a location reference utilizes means for providing terrestrial based trilateration to establish said location reference.

9. A method for defining a GPS receiver code-phase search range for an integrated GPS/wireless terminal unit operating in a wireless network having a base station, comprising the steps of:

calculating a GPS code-phase search range with reference to the base station geographic location plus the wireless coverage area, and with reference to a base station GPS time reference plus the estimated wireless signal propagation delay within said coverage area and

transmitting said calculated GPS code-phase search range.

10. The invention of Claim 9 wherein said GPS code-phase search range is defined by a center value and a size value.

11. A method for defining a GPS receiver code-phase search range for an integrated GPS/wireless terminal unit operating in a wireless network having a base station, comprising the steps of:

obtaining a time reference for the GPS/wireless terminal unit establishing the time offset relative to the base station GPS time;

calculating a GPS code-phase search range with reference to the base station geographic location plus the wireless coverage area, and said time reference; and

transmitting said calculated GPS code-phase search range.

12. The invention of Claim 11 wherein said GPS code-phase search range is defined by a center value and a size value.

13. The invention of Claim 11 wherein said obtaining step utilizes the round-trip wireless signal propagation time between said base station and the terminal unit to establish the time offset.

14. A method for defining a GPS receiver code-phase search range for an integrated GPS/wireless terminal unit operating in a wireless network having a base station, comprising the steps of:

obtaining a time reference for the GPS/wireless terminal unit establishing the time offset relative to the base station GPS time;

obtaining a location reference for the GPS/wireless terminal unit;

calculating a GPS code-phase search range with reference to said location reference, and said time reference; and

transmitting said calculated GPS code-phase search range by the base station.

15. The invention of Claim 14 wherein said GPS code-phase search range is defined by a center value and a size value.

16. The invention of Claim 14 wherein said obtaining a location reference step utilizes terrestrial based trilateration techniques to establish said location reference.